## RESPONSE TO EPA REQUEST FOR INFORMATION REGARDING DIESEL FUEL USE IN HYDRAULIC FRACTURING ACTIVITIES RAILROAD COMMISSION OF TEXAS July 28, 2016

## 1. What regulatory or other "controls" are in place regarding the use of diesel fuels in hydraulic fracturing since EPA issued the DFHF guidance and memo?

The Commission has issued two notices to operators regarding this issue. A copy of each of these notices is attached.

In addition, all drilling permits issued after July 20, 2014, include the following language:

Hydraulic Fracture Stimulation using Diesel Fuel: Most operators in Texas do not use diesel fuel in hydraulic fracturing fluids. Section 322 of the Energy Policy Act of 2005 amended the Underground Injection Control (UIC) portion of the federal Safe Drinking Water Act (42 USC 300h(d)) to define "underground injection" to *EXCLUDE* "...the underground injection of fluids or propping agents (other than diesel fuels) pursuant to hydraulic fracturing operations related to oil, gas or geothermal production activities." (Italic and underlining added.) Therefore, hydraulic fracturing may be subject to regulation under the federal UIC regulations if diesel fuel is injected or used as a propping agent. EPA defined "diesel fuel" using the following five (5) Chemical Abstract Service numbers: 68334-30-5 Primary Name: Fuels, diesel; 68476-34-6, Primary Name: Fuels, diesel, No. 2; 68476-30-2 Primary Name: Fuel oil No. 2; 68476-31-3 Primary Name: Fuel oil, No. 4; and 8008-20-6 Primary Name: Kerosene. As a result, an injection well permit would be required before performing hydraulic fracturing stimulation using diesel fuel as defined by EPA on any well in Texas. Hydraulic fracture stimulation using diesel fuel as defined by EPA on a well in Texas without an injection well permit could result in enforcement action.

Effective January 2, 2012, the Commission adopted regulations requiring disclosure to FracFocus of chemical ingredients used in hydraulic fracturing treatments. (See 16 Texas Administrative Code §3.29, relating to Hydraulic Fracturing Chemical Disclosure Requirements, at <a href="http://www.rrc.texas.gov/legal/rules/current-rules/">http://www.rrc.texas.gov/legal/rules/current-rules/</a>.) The Commission uses FracFocus to screen for wells on which hydraulic fracturing stimulation treatment has been performed using "diesel fuel" as defined by EPA.

## 2. Have there been plans for or documented incidences of diesel fuel use? If so, what was the outcome of addressing such incidences - permitting, enforcement, alternative chemical use, etc.?

Before it was possible to search FracFocus by CAS number, the Commission reviewed completion reports and other Commission forms to determine if diesel fuel had been used in hydraulic fracturing. Several instances were identified in 2010 and 2011, and again in 2013. The Commission contacted the operators requesting information regarding the possible use of "diesel fuel." A few operators advised that the ingredient and CAS number were in error. Other operators advised that the diesel fuel was used to cut paraffin inside a wellbore. Three operators advised that diesel fuel was used in stimulation and that such use would be discontinued.

EPA defined the term "diesel fuel" in an interpretive memorandum dated February 5, 2014, and in the guidance to EPA UIC permit writers dated February 2014 (Guidance #34). Since that time, the Commission has used FracFocus to screen for wells on which hydraulic fracturing stimulation treatment has been performed using chemical ingredients with CAS numbers by which EPA defined the term "diesel fuel" in its guidance documents.

We identified six (6) additional wells in Texas where the operator reported the use of diesel fuel as defined by EPA in hydraulic fracturing treatments. Four wells were fracture stimulated in 2014, one well in 2015 and another well in 2016. The Commission contacted the operators of these wells for additional information. The operators of all six wells provided the Commission with information demonstrating that the CAS numbers were entered incorrectly; none of the chemical ingredients used by the operators of these six wells used chemical ingredients with a CAS number by which EPA has defined "diesel fuel." The operators have, or will, correct the filings on FracFocus; however, the records of both filings (the original and the corrected filings) will be retained by FracFocus.

You indicated that the goal is to "determine whether diesel fuels are used in hydraulic fracturing activities; and, if so, whether the EPA, states and tribes are issuing permits in accordance with the SDWA and UIC regulations." There are no specific regulations regarding permitting of wells on which hydraulic fracturing stimulation treatment has been performed using diesel fuels as defined by EPA—only guidance for Direct Implementation states and the interpretive memorandum.